

REMARKS

The Office Action dated February 18, 2005 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1-20 are pending in this application. Claims 1-6 and 13-20 have been withdrawn from consideration. Claims 7-12 stand rejected.

In response to the restriction requirement set forth in the Office Action, in a telephone conference on February 14, 2005 Applicants elected, with traverse, for prosecution in this application all claims of Group II as identified in the Office Action. Claims 7-12 are in the elected claim group.

The restriction requirement is traversed because the inventions set out by the claims in Groups I, II, and III are clearly related. It is believed that a thorough search and examination of any claim group would be relevant to the examination of the other groups. In addition, requirements for restriction are not mandatory under 35 U.S.C. Accordingly, reconsideration of the restriction requirement is respectfully requested.

The rejection of Claims 7-12 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Specifically, Claim 7 has been amended to replace “gas turbine engine” with “combustor” at line 5, such that Claim 7 recites “an injection tip for discharging fuel into said combustor in a direction that is substantially parallel to the combustor centerline axis....” Additionally, Claim 7 has been amended to replace “engine” with “combustor” at line 8, such that Claim 7 recites “said outlet for discharging cooling air external to the combustor.” Claims 8-12 depend from independent Claim 7. Accordingly, Claims 7-12 are submitted to satisfy the requirements of Section 112, second paragraph. For at least the reasons set forth above, Applicants respectfully request the Section 112, second paragraph, rejection of Claims 7-12 be withdrawn.

The rejection of Claims 7 and 9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Pub. No. 2002/0073707 (Lavie) in view of U.S. Patent No. 4,216,908 (Sakurai) is respectfully traversed.

Lavie describes an injector 14 for a two-headed combustion chamber 20 for a turbomachine. The injector 14 includes a first feed tube 170 that is connected to an annular injection piece 152 for discharging primary fuel into the combustion chamber 20, and a second feed tube 176 that extends circumferentially around first feed tube 170 and is connected to a cylindrical endpiece 158 for discharging secondary fuel into combustion chamber 20. Endpiece 158 includes an annular channel 162 that has a diameter that is greater than a diameter of second feed tube 176. A third feed tube 200 extends circumferentially around second tube 176 and is connected to a tubular separation element 192. Element 192 extends into annular channel 162 to define two annular spaces 194 and 196 for accommodating a cooling fluid.

Sakurai describes a burner for liquid fuel. The burner includes a liquid fuel supply conduit 1 and an assembly 5 for forming auxiliary combustion gas supplying passages that are disposed around the liquid fuel supply conduit 1. The liquid fuel supply conduit 1 includes a truncated conical tip 2 including a spraying nozzle 3 coupled to a trapezoidal plane of the tip 2. The burner also includes a combustion chamber 12 formed by a jacket 6 and the assembly 5 for burning a mixture of fuel and gas supplied thereto.

Applicants respectfully submit that the Section 103 rejection of Claims 7 and 9 is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Lavie nor Sakurai, considered alone or in combination, describe nor suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Lavie with Sakurai, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather,

there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection be withdrawn.

Moreover, to the extent understood, no combination of Lavie and Sakurai describes nor suggests the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 7 recites a fuel injector for a gas turbine engine combustor including a centerline axis, wherein the fuel injector comprises "a fuel inlet coupled to a cooling air source...an injection tip for discharging fuel into said combustor in a direction that is substantially parallel to the combustor centerline axis...and a body extending between said inlet and said injection tip, said body comprising at least one air inlet and at least one air outlet, said inlet for receiving

cooling air within said body, said outlet for discharging cooling air external to the combustor."

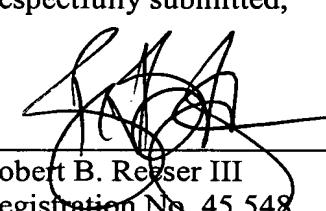
Neither Lavie nor Sakurai, considered alone or in combination, describe nor suggest the fuel injector recited in Claim 7. For example, neither Lavie nor Sakurai, considered alone or in combination, describe nor suggest a fuel injector including a fuel inlet coupled to a cooling air source, as recited in Claim 7. Rather, Lavie describes an injector for a two-headed combustion chamber and Sakurai describes a burner for liquid fuel, but neither Lavie or Sakurai describe nor suggest a fuel injector including a fuel inlet coupled to a cooling air source. Accordingly, Claim 7 is submitted to be patentable over Lavie in view of Sakurai.

Claim 9 depends from independent Claim 7. When the recitations of Claim 9 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 9 likewise is patentable over Lavie in view of Sakurai.

For at least the reasons set forth above, Applicants request that the Section 103 rejection of Claims 7 and 9 as being unpatentable over Lavie in view of Sakurai be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,

  
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